U.S. Department of the Interior
Bureau of Land Management

Prineville District Office
3050 N.E. 3rd Street
Prineville, Oregon 97754

October 2003

Draft

Upper Deschutes Resource Management Plan and Environmental Impact Statement

Volume 1 - Executive Summary

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM/OR/WA/PL-03/047+1792

U.S. Department of the Interior
Bureau of Land Management

Draft Upper Deschutes Resource Management Plan and Environmental Impact Statement

Prepared by

Deschutes Resource Area Office
Prineville District
September 2003

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Draft Upper Deschutes Resource Management Plan and Environmental Impact Statement

1. Responsible Agency: United States Department of the Interior, Bureau of Land Management

2. Cooperating Agencies: Deschutes County, City of Redmond, Oregon Department of Transportation, Federal Highway Administration, Oregon Military Department.

2. Draft (X) Final ( )

3. Administrative Action (X) Legislative Action ( )

4. Abstract: The Draft Upper Deschutes Resource Management Plan and Environmental Impact Statement analyzes seven alternatives for managing approximately 404,000 acres of land administered by the Bureau of Land Management in Central Oregon. Small portions of these lands are located in the northern Klamath County and the southern portion of Jefferson County. About 57% of the lands are in Deschutes County while about 36% are in Crook County. Each of the Action Alternatives would Revise the 1989 *Brothers/La Pine Resource Management Plan* (B/LP RMP) for the western portion of its planning area and change the boundary of the Two Rivers Resource Management plan by incorporating about 15, 000 acres (3,694 acres administered by the BLM) into the B/LP RMP planning area. Minor decisions would amend the Middle Deschutes and Lower Crooked River Wild and Scenic River Plans. The seven alternative combinations of land use allocations and allowable uses respond to the significant issues identified during scoping: Ecosystem Health, Land Uses, Recreation, Transportation and Utility Corridors, Land Ownership, Public Health and Safety, Archaeology, and Social and Economic Values. Alternative 7 has been identified as the Preferred Alternative.

Alternative 1 –Current Management (No Action/No Change)
Common to Alternatives 2 through 7 –Some common changes to the current management would be adopted in Alternatives 2-7.
Alternative 2 –T his alternative would emphasize providing multiple uses within most of the planning area.
Alternative 3 –This alternative would emphasize managing for wildlife and would separate recreational uses. Areas of Critical Environmental Concern (ACEC) would be used to meet wildlife and other management objectives.
Alternative 4 –Alternative 4 combines the approaches used in Alternatives 2 and 3. ACECs would provide special management objectives for ecosystem and wildlife habitat values, but on a smaller scale than in Alternative 3.
Alternative 5 –This alternative would reduce activities that conflict with wildlife habitat objectives within the "urban" areas. It would rely on broad-scale conservation approaches across the planning area.
Alternative 6 –This alternative would reduce activities that conflict with wildlife habitat objectives in "rural" areas. It would rely on smaller-scale conservation approaches across the planning area.
Alternative 7 (Preferred Alternative) –The Preferred Alternative combines features of the previous alternatives. It places an emphasis on wildlife habitat in the SE or "rural" portion of the planning area, but also permits year-round motorized use in much of that area. It emphasizes separation of recreational uses over shared uses, and distributes recreation areas relatively equally across the planning area.

Date draft issued: October 17, 2003

Date comments on the draft must be received: January 15, 2004.

Comments must be filed at the Prineville District Office attention: Teal Purrington at the address below or at the following e-mail address: upper_deschutes_RMP@or.blm.gov. You may also respond via fax to (541) 416-6798.

Responsible Official: Robert Towne, Deschutes Field Manager, Prineville USDI Bureau of Land Management

Authorizing Official: Elaine M. Brong, State Director, Oregon-Washington USDI-Bureau of Land Management

For further information contact:
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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Prineville District Office
3050 N.E. 3rd Street
Prineville, Oregon 97754

IN REPLY REFER TO:
1690.9(i)(3)

Dear Friend of the Upper Deschutes Resource Area:

This document, the *Draft Upper Deschutes Resource Management Plan and Environmental Impact Statement*, analyzes a range of alternatives that address significant issues concerning the management of BLM administered lands in Central Oregon. The alternatives consider a range of values. I invite you to carefully consider the alternatives and their consequences for the future of the natural resources on public lands and the needs and wants they meet in Central Oregon.

If you have received only Volume 1 of this document and would like to receive a complete document please contact Prineville District of the BLM at (541) 416-6700 or by e-mail at upper_deschutes_RMP@or.blm.gov. However only a limited number of hard copies of the document were printed. You may also view a full version by visiting the internet website listed below or we can send you a CD ROM version. Both the website and the CD ROM version will contain supplemental maps not available as hard copies.

Release of this document initiates a 90 day public comment period on its contents. Please use this time to consider and comment on the Draft Plan and EIS. See the following page for directions on how to comment.

During the 90 day comment period we will conduct several open houses in Central Oregon where you will have the opportunity to ask questions and/or comment about the draft directly to BLM staff and managers.

Public Meetings for the DEIS

Wednesday November 12, 7-9 pm
La Pine Middle School cafeteria
16360 1st Street, La Pine

Tuesday November 18, 7-9 pm
Carey Foster Hall
590 SE Lynn Blvd., Prineville

Wednesday November 19, 7-9 pm
Redmond High School commons + auditorium
675 SW Rimrock Way, Redmond

Thursday November 20, 7-9 pm
Highland Elementary School gym
(shown as Kenwood Elem. School on map in phone book)
701 NW Newport Ave, Bend

For ongoing updates please access the Prineville BLM web site: http://www.or.blm.gov/Prineville .

We appreciate your help in this planning effort and look forward to your continued interest and participation. For additional information or clarification regarding this document, please contact Mollie Chaudet at (541) 416-6700.

Sincerely,

Robert B. Towne
Field Manager, Deschutes Resource Area

Comment Period and How to Comment

The comment period begins when the Environmental Protection Agency the publishes the "Notice of Availability for the Draft Upper Deschutes Resource Management Plan and Environmental Impact Statement" in the Federal Register. This will occur on October 17, 2003. Comments must be postmarked no later than January 15, 2004. You may comment by fax, mail, or e-mail. Comments should be to the attention of Teal Purrington.

Fax number: (541) 416-6798

Mailing address: Bureau of Land Management
3050 NE Third Street
Prineville OR 97754

Email: upper_deschutes_RMP@or.blm.gov

Comments are most useful when they do one or more of the following: 1) cite errors in the analysis; 2) provide new information that would have a bearing on the analysis; 3) request clarification; 4) cite misinformation that may have been used and could affect the outcome of the analysis.

Privacy

Comments, including names and street addresses of respondents, will be retained on file in the Prineville District Office as part of the public record for this planning effort. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public inspection, or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

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How this Document is Organized

Volume 1 contains all introductory materials including the Executive Summary.

Some readers may have only received this volume. Volume 1 is a key component of the Draft RMP and EIS. It contains instructions for commenting, the executive summary, the glossary, and a list of abbreviations and acronyms used throughout all 3 volumes of this document. For a complete understanding of the document it is necessary to review the other volumes.

Volume II contains Chapters 1 through 5, References, and Index.

Chapter 1 describes the purpose and need of this document and describes the issues to be addressed by the alternatives.

Chapter 2 describes a range of alternatives, including the No Action Alternative (Alternative 1) and the Preferred Alternative (Alternative 7). The alternatives describe different ways the resources on BLM-administered lands could be managed. It is important to note that the No Action Alternative does not mean that no management actions will be taken but that existing management direction carried forward into the future. Alternatives 2-7 describe changes in management in the future.

Chapter 3 describes the existing conditions within the planning area.

Chapter 4 describes the direct, indirect, and cumulative effects of implementing each of the alternatives. In brief Chapter 4 describes how natural resources as well as social and economic conditions will be affected by each of the alternatives.

Chapter 5 describes the collaborative process through which this document was developed.

References provide the full citation of documents referred to in the text.

Index provides page numbers where key information is discussed.

Volume III contains the Appendices.

The Appendices contain information that elaborates on information provided in the first 3 volumes.

Maps

There are two sets of maps to illustrate the distribution of resources, elements of alternatives, roads and other rights-of-way and other features of the planning area. The first set, numbered 1 through 38, display the alternatives and are in a packet with the full hardcopy Draft Resource Management Plan and Environmental Impact Statement or with Volume 1 for those that did not request a hard copy of the full Draft Management Plan and EIS. These maps are also available at the Prineville District Website and on CD-ROM. The second set of maps contains supplemental maps, utilized by the Interdisciplinary team, are numbered S-1 through S-46. These maps are not available as hardcopies but may be viewed on the Prineville District Website or by requesting a CD-ROM.

Draft Upper Deschutes Resource Management Plan And Environmental Impact Statement

Executive Summary

This Draft Resource Management Plan and Environmental Impact Statement (UDRMP) is the second document in the process to revise the *Brothers/La Pine Resource Management Plan* (B/LP RMP)(BLM, 1989). The first document, the *Analysis of the Management Situation for the Upper Deschutes Resource Management Plan and Environmental Impact Statement* (AMS)(BLM, 2001), noted that conditions had changed dramatically since the 1989 management plan and documented the need for revision.

The Bureau of Land Management (BLM) developed this Draft RMP/EIS in cooperation with Deschutes County, City of Redmond, Oregon Department of Transportation, Federal Highway Administration, and Oregon Military Department. Each of these entities have governmental and land management responsibilities within the planning area and will be using this environmental analysis to support their future decisions. These Cooperators and other tribal, local, state, and federal partners and private stakeholders from a diverse range of interest groups have actively participated in the planning process. The Deschutes Provincial Advisory Committee chartered a working group, the Upper Deschutes RMP Issue Team, made up of representatives of the cooperators and other stakeholders, to advise the BLM during the planning process.

The UDRMP analyzes 7 alternatives for resolving the significant issues involved in managing over 400,000 acres of lands administered by the BLM within the planning area. The enclosed Map Packet includes Maps 1-38. These maps display the planning area and key elements of the Alternatives.

Significant Issues

This planning process is driven by issues surrounding the rapid population growth within and adjacent to the planning area and the increasing demands on natural resources associated with that growth. These issues were organized into nine significant issue categories. These include: Ecosystem Health and Diversity, Land Uses, Visual Resources, Recreation, Transportation and Utility Rights-of-Way, Land Ownership, Public Health and Safety, Archaeological Resources, and Social and Economic Values.

Key Concepts

There are a number of key concepts used to develop the alternatives that are helpful to understand prior to reviewing the alternatives. These are briefly described below.

Urban and Rural Areas

The alternatives are shaped significantly by the changing urban and rural character of the communities and economies within this area. Alternatives 5, 6, and 7 reflect those dynamics with management emphasis for certain lands based on the relative “urban” or “rural” character of the surrounding land uses (non-BLM) in the area. These concepts can be identified by certain general characteristics.

"**Urban**" areas administered by the BLM have one of the following characteristics:

- They are adjacent to urban or rural population centers – including high density non-conforming rural land uses, residential or resort zoning, or small acreage development;
- They are in areas where non-public land ownership tends to be highly fragmented, and flanked or surrounded by BLM-administered lands.

"Rural" lands in the planning area generally have the following characteristics:

- They are adjacent to large blocks of agricultural zones and uses;
- The public ownership may be fragmented, often without public access, but usually surrounded by low density development associated with rural agricultural rather than rural residential or small acreage developments;
- The public lands are in generally large contiguous blocks adjacent to national forests and grasslands or other BLM-administered lands to the east.

Conflict and Demand

All of the alternatives focus on balancing conflict and demand. This is especially apparent between recreational user groups and between adjacent rural or urban residents and public land uses such as motorized recreation, livestock grazing, and mineral development.

Livestock Grazing and Mineral Development

A conceptual framework was developed to evaluate the conditions under which livestock grazing and mineral sales could occur during the planning cycle. The framework enables decision makers to weigh different levels of conflict with different levels of demand for these uses.

Recreational Use

Conflicts in the planning area occur between public land visitors and adjacent landowners as well as between different types of recreationists (e.g., motorized vs. non-motorized users). Conflicts also occur between similar recreational visitors, such as when a motorized trail system becomes crowded and results in unsafe conditions (dust, poor visibility, large number of encounters). The recreation alternatives address these conflicts and demands by establishing travel management designations (Open, Limited, or Closed) and recreation emphasis designations (multiple use shared facilities, multiple use separate facilities, non-motorized emphasis, non-motorized exclusive, non-recreation emphasis, or roads only emphasis).

Source Habitats

The source habitat concepts used in this plan have been adapted from the strategy developed in the Interior Columbia Basin Ecosystem Management Project (ICBEMP) for managing terrestrial source habitats for wildlife. Source habitats are those characteristics of vegetation that contribute to a species' population maintenance or growth over time and within an area. These source habitats are described using the dominant vegetation cover type and the structural stage, various combinations of which make up the source habitats for the terrestrial families and provide the range of vegetation conditions required by these species for cover, food, reproduction, and other needs. Management direction for source habitats is to change declining trends in terrestrial habitats by maintaining important vegetation characteristics (such as plant species composition, rangeland and forest vegetation structure, snags, and coarse woody debris), which various terrestrial species need to survive and reproduce.

Current Distribution

Current distribution reflects a management emphasis on shaping vegetative communities to rehabilitate specific areas or achieve specific resource objectives in priority areas. This management approach would emphasize maintaining or restoring wildlife source habitats within their current geographic distribution. Some high priority areas would overlap and be similar to those identified under an "historic" approach, but generally potential future treatments would be expected to be smaller with less total treatment acres anticipated.

Historic Range of Variability

Historic range of variability reflects more of an emphasis on a return toward "pre-European" conditions and distribution than does the focus on current distribution. Under this management emphasis BLM administered lands would be managed to expand and/or distribute source habitats throughout their historic range by increasing their current geographic distribution, improving connectivity, and increasing patch size (typically for shrub-steppe habitats, and to a lesser degree ponderosa pine habitats, but typically decreasing the amount and distribution of juniper woodlands and lodgepole pine habitats). The "historic" approach emphasizes biological diversity and management is focused on maintaining and restoring conditions similar to those developed by natural disturbance processes.

Habitat Effectiveness

Habitats' contribution to wildlife populations depends on the habitat condition, and can be displayed in terms of "habitat effectiveness". Habitat effectiveness can be influenced by a number of factors, such as plant species composition, structural condition (quality), patch size, location (juxtaposition), and the amount of disturbance (caused by people). Objectives for specific levels of habitat effectiveness are included in the wildlife emphasis levels identified in each of the alternatives.

Wildlife Emphasis Levels

Each of Alternatives 2-7 identifies a mix of three wildlife management emphasis levels-- primary, secondary or minor. The mix, which varies by alternative, would be expected to benefit all species of focus (e.g. ungulates, neotropical migratory birds, special status species, etc.). The main techniques used for managing for wildlife under the different alternatives include designating areas within the plan with an objective of primary, secondary or minor wildlife emphasis.

Primary wildlife emphasis means wildlife is one of the most important management considerations for an area. Areas allocated to primary emphasis are intended to benefit wildlife and retain high wildlife use by applying specific guidelines that include targeted habitat effectiveness levels.

Secondary wildlife emphasis means wildlife is one of several resource management concerns in an area. Areas with a secondary wildlife emphasis typically receive a slightly lower, but still significant, level of management consideration compared to primary wildlife emphasis areas. Areas allocated to a secondary emphasis are intended to support wildlife and maintain a moderate amount of use.

Minor wildlife emphasis occurs where wildlife concerns are subordinate to most other resource management programs. These areas, as a whole, would still contribute to species occurrence and distribution, but typically are not the focus of intense

management efforts for wildlife. Generally, guidelines are tied to minimum legal requirements identified in the sections on "common" guidance.

Alternatives

Upper Deschutes Resource Management Plan (UDRMP) examines seven alternatives, including Alternative 1 the No Action/No Change Alternative. The alternatives were developed to resolve the issues. Alternative 7 has been identified as the Preferred Alternative. This section provides a brief overview of the general approach taken in each of the alternatives and provides summary tables displaying how the significant issues are addressed.

Management Direction Common to All Alternatives

As a plan revision this document incorporates guidance from the B/LP RMP and other subsequent guidance developed by the Prineville District. In addition management of BLM administered lands is guided by law, regulation, and policy. This guidance is described in Appendix C in Volume III of the full UDRMP. The following Table ES-1 reflects past guidance developed by the Prineville District that is not being revised by this plan and will continue to guide management within the planning area.

Management Direction Common to Alternatives 2 through 7

There are some changes to the No Action/No Change Alternative that would be common management direction for Alternatives 2 – 7. These are displayed in Table ES-2

Management Direction that Varies by Alternative

All of the "action" alternatives make an effort to develop a balance of uses. Generally, none of the alternatives eliminates any one type of use entirely. In many cases, if a use is more limited in one geographic area in a particular alternative, there may be an increase in that use elsewhere in the planning area in the same alternative to maintain a balance of uses in each alternative.

Alternative 1 – No Action/No Change

This section describes the current management direction provided by the existing Resource Management Plans (RMPs) and subsequent decisions applicable to the Upper Deschutes Planning area. This alternative includes existing direction for the Millican OHV area from the Millican OHV Environmental Assessment and Millican litigation settlement agreement.

Alternative 2

This alternative would have the least amount of overall change from current management. In general, this alternative would continue a mix of uses throughout the planning area, resolving conflicts on a case-by-case basis rather than by separating uses, or applying specific conflict and demand thresholds. Alternative 2 would emphasize providing multiple uses in the same areas.

Alternative 3

This alternative increases emphasis on reducing conflicts between human uses and wildlife habitat management objectives, and separating recreational uses. This alternative relies strongly on the use of Areas of Critical Environmental Concern (ACECs) as a management strategy to meet wildlife and other management objectives and places

Table ES-1 Management Guidance Continued in this Document

Issue	Management Common to All Alternatives (excluding law, regulation and policy)
Vegetation Noxious Weeds	Prineville District Integrated Weed Management EA (1994)
Wildlife Special Status Species	Vegetative habitats could be maintained or improved using a variety of techniques, such as mowing, prescribed burning, livestock grazing and commercial and non-commercial tree cutting. When data are insufficient to make an assessment of proposed actions, surveys of potential habitats would be made before a decision is made to take any action that could affect special status species (B/LP RMP p. 122). Management activities in the habitat of listed, candidate threatened, or endangered and sensitive species would maintain or improve habitat (B/LP RMP modified, p. 121).
Non-Special Status Species	Vegetative habitats would be maintained or improved using a variety of techniques, such as mowing shrubs, prescribed burning, livestock grazing and/or commercial timber harvest and non-commercial tree cutting. All new fences for the control of livestock would be built to standard Bureau wildlife specifications to allow wildlife passage and existing fences would be modified as appropriate (BLP RMP, p. 97), with the exception of fences built specifically to keep ungulates out of an area. Fish and wildlife habitat management impacts would continue to be evaluated on a case-by-case basis as part of project-level planning (i.e., grazing, recreation and timber management plans, right-of-way applications, etc.) (B/LP RMP, p. 97). Evaluations would consider the significance of the proposed projects and the sensitivity of fish and wildlife habitats in the affected areas. Stipulations would be attached as appropriate to assure compatibility of projects with management objectives for fish and wildlife habitat (BLP RMP, p. 97). Permitted activities would be restricted in all areas where vegetation manipulation (human or naturally caused) occurs and results in sensitive soil and plant conditions, or the site already has sensitive soils and/or plant conditions. These permitted activities include, but are not limited to, livestock grazing, off-road vehicle travel, recreational events, construction of new roads and trails, and timber harvests. Range developments would be designed to achieve both wildlife and livestock grazing management objectives. Where natural springs exist and are developed, the development would provide a more dependable water source for wildlife as well as livestock. Water troughs would accommodate use by wildlife and livestock, and would be constructed with wildlife escape devices. The spring area and the overflow would be fenced to exclude livestock trampling (B/LP RMP, 87-88). Where pipelines are developed to deliver water more than two miles from an existing water source, the water system would be designed to provide water for wildlife between July and October (B/LP RMP, p. 97). Manage important wildlife habitats to minimize human disturbance by maintaining seasonal closures throughout the sensitive period (B/LP RMP, p. 97). In seasonally important wildlife habitats (winter range, nest sites, roosts, etc.), major construction and maintenance work would be scheduled to avoid or minimize disturbance to wildlife (B/LP RMP, p. 97). Timber sales would be designed to provide sufficient cover to maintain the existing deer and elk migration corridor through the La Pine area (B/LP RMP, p. 97).

Special Management Areas	
Areas of Critical Environmental Concern (ACEC)	Area designated Pecks milkvetch ACEC under B/LP RMP would remain an ACEC or become part of a larger ACEC. Livestock grazing: Allowed providing restrictions or stipulations are designed to maintain or enhance special values. A portion of the Wagon road ACEC will remain an ACEC (see Common to 2-6 for changes in configuration) Horse Ridge and Powell Butte RNA/ACECs would retain status.
Wilderness Study Areas	Badlands would remain an ACEC and WSA. (unless congress designates Badlands as Wilderness)
Caves	The following nominated caves within the planning area have been determined to be Significant under the FCRPA (with the year of determination): • Horse Butte Indian Cave (1995) • Pictograph (Stout) Cave (1995) • Redmond Cave (1995) • Garbage Cave #1* (1997)[1] • Garbage Cave #2*(1997) • Three Vulture Cave*(1997) • Williams Cave*(1997) • Stevens Road Cave*(1997) • Unnamed Car Cave*(1997)

[1] The BLM managed land containing these caves was claimed by the State of Oregon under State in-lieu selection process (1997) and is no longer under Federal management.

Land Use	
Livestock Grazing	All areas currently closed to livestock grazing would stay closed. Modify or discontinue livestock grazing if Rangeland Health Assessment shows livestock are contributing to the failure of an area to meet the Standards for Rangeland Health (BLM, 1997) Restrict or prohibit livestock grazing and rangeland projects in ACECs, WSAs, and Wild and Scenic Rivers, if the use is not compatible with the values for which the areas are designated. Prevent BLM-permitted livestock from straying onto private land in closed range, where requested by private landowner.
Mining	• 396,185 acres are available for locatable mineral entry under the 1872 mining laws. • 366,640 acres are available for mineral leasing. • 301,078 acres available for saleable materials • Surface occupancy for fluid mineral leasing is not allowed on 16,480 acres surrounding Prineville Reservoir. • Reserved Federal mineral estate (Federally owned minerals in non-Federally owned lands) may be explored and developed for mineral resources.
Commercial Forestland	Manage approximately 41,111 acres of commercial forestland in the La Pine block and approximately 977 acres of commercial forestland in the northern area in a sustainable manner. Allow harvest of up to 2,000 cords of firewood and other wood products from the approximately 170,000 acres of juniper woodlands. Harvest may be accomplished by a variety of manual and mechanized techniques. Cutting areas would be designed to blend with the natural landscape and topography. Consider direction in the La Pine State Park Master Plan and the guidelines of the Upper Deschutes RMP when managing the BLM-owned vegetative resource in La Pine State Park Develop a rockhounding management plan for North Ochoco Reservoir.
Rockhounding	Monitor rockhounding sites through visitor use surveys, photographs, and periodic soil and vegetative condition inventories to determine disturbance attributable to recreation. Use baseline data to determine limits of acceptable change.
Military	Military will be permitted to train on BLM lands.
Recreation	The following areas are designated as Closed to motorized vehicles: • Airport Allotment • Horse Ridge and Powell Butte RNAs • Smith Rock block • Southern portion of the Wagon Road ACEC The following river sections are designated Closed to motorized vehicles: • Little Deschutes Parcel • Middle Deschutes consistent with Wild and Scenic River Plan • Lower Crooked River consistent with Wild and Scenic River Plan An area management plan would be prepared for the Cline Buttes area.
Transportation and Utilities	Existing transportation/utility corridors identified by The Western Regional Corridor Study would continue to be designated as transportation/utility corridors. Existing communications sites in the planning area have been identified. Areas of critical environmental concern, wilderness study areas, and Wild and Scenic Rivers would be designated as right-of-way exclusion areas. All areas identified as having special status plant or animal species would be designated as avoidance areas.

Land Ownership

About 191,038 acres identified as Z-1 in B/LP RMP that would continue to be Z-1 under all alternatives.

About 1,700 acres identified as Z-2 in B/LP RMP that would continue to be Z-2 under all alternatives.

About 1,706 acres of public lands identified as Z-3 in B/LP RMP would continue as Z-3. These lands include isolated parcels between Bend and Redmond, isolated parcels around Prineville, and isolated parcels northwest of La Pine.

About 1,605 acres of land identified for community expansion in B/LP RMP are identified as suitable for community expansion in all alternatives

There are 28,580 acres of land identified as suitable for acquisition in B/LP RMP that have also been identified as suitable for acquisition under Alternatives 2-7.

> Note: All parcels and areas that are selected for acquisition would remain the same throughout the alternatives, although the emphasis on the order or timing of the acquisition may vary according to each alternative.

Private parcels to acquire should (1) facilitate access to public land and resources, (2) or maintain or enhance important public values and uses, or (3) maintain or enhance local social and economic values in public ownership by:

- Reducing the number of developed inholdings that may cause resource or social conflicts
- Improving wildlife values
- Improving or increasing habitat of special status species
- Improving or increasing riparian or wetland habitats
- Improving wildlife travel corridors
- Improving recreation opportunities
- Providing new or improved trail links
- Providing access to public lands that currently have no legal access
- Providing new or expanding existing recreation opportunities that are limited or in high demand
- Providing for better management of special management areas/sites such as ACECs, WSAs, etc.

Public Health and Safety

Pursuant to 43 CFR 9212.2 (a) "To prevent wildfire or facilitate its suppression, an authorized officer may issue fire prevention orders that close entry to, or restrict uses of, designated public land," the following sections of river are closed to campfires seasonally, from June 1 to October 15th:

1. Within ½ mile of the River's edge along the Lower Crooked River from the Highway 97 bridge to Lake Billy Chinook,
2. Within ½ mile of the River's edge along the Middle Deschutes River from Highway 20 bridge to Lake Billy Chinook,

If determined necessary, the fire closures could be extended based on existing conditions.

Archaeology

As described under special management areas a portion of the Wagon road ACEC will remain an ACEC.

At a minimum, survey 50 acres annually in areas considered to be of high probability the location and discoverability of significant archaeological sites.

Table ES-2 Guidance Common to Alternatives 2-7

Issue	Guidance Common to 2-7
Ecosystem Health and Diversity	Objectives--maintain current healthy conditions and restore native plant communities in sustainable proportions.
Vegetation	Focus restoration efforts on areas most likely to benefit from those efforts. Emphasize use of native vegetation Identify appropriate conditions for using non-native vegetation, Provide for retention of woody material in treatment areas, and integrating soil productivity and wildlife habitat woody material objectives. Emphasize the restoration of more sustainable conditions related to natural fire occurrence and other disturbance factors, and the integration of wildlife source habitat objectives into general vegetation management objectives. Guidance by vegetation type. Old growth juniper ecosystems promote conditions that would benefit sustainable old growth components and would consider the integrity and relative importance of ecosystem characteristics that could be affected by management activities. Almost 13,000 acres would be treated. Shrub-steppe restoration in the Millican sage grouse area. Shrub-steppe restoration would include substantial young juniper reduction to return it toward its natural fire-restricted role within most plant communities. Ponderosa pine Thin within ponderosa pine stands to reduce risk of fire, insects and disease and improve health and vigor of ponderosa pine stands. Almost 6,000 acres would be treated Lodgepole pine Treatments within the mature lodgepole pine type would be a low priority except within wildland urban interface (WUI) areas (see below) Special status plant species Emphasize integration of habitat improvement with overall vegetation management objectives and treatments. Provide direction to consider protection, restoration and enhancement of the species' range.
Wildlife	Special Status Species Develop Bald Eagle habitat conservation strategies for areas around Prineville Reservoir and Grizzly Peak that include important landscape features. Implement the Greater Sage Grouse and Sagebrush Steppe Ecosystems Management Guidelines (BLM IB No. OR-2000-334). Recognize the potential for future management of the Redmond Caves to emphasize Townsend's big eared bat populations if suitable habitat is present, May require closure of a portion of the Redmond Cave system to public use. Integrate ongoing data gathering and inventories and develop analysis tools to streamline future evaluations of effects of management actions. Species of Local Importance Manage certain areas for primary, secondary, or minor wildlife emphasis as described under the Key Concepts. Consider connectivity corridors for all species during management activities to avoid barriers to effective utilization of those areas. Promote suitable year-round habitat conditions for pronghorn in the Bend-Redmond block . Protect and restore special habitat features that contribute to the general productivity of these species.

Hydrology	Most direction for maintaining or restoring water quantity and quality, riparian areas, and hydrologic function is common to Alternatives 2-7. This direction incorporates the scientific information from the Interior Columbia Basin project Utilize the proper functioning riparian conditions process to evaluate and provide future management direction for riparian areas. Determine areas adjacent to streams within which activities could affect the riparian functions of the area stream. Activities within these areas would not affect progress toward proper functioning conditions or meeting state water quality standards. Emphasize providing complex stream and riparian structure, and biologically diverse habitats to support proper stream and riparian functions. Emphasize maintenance of existing roads and elimination of roads not designated and maintained that could affect riparian function or water quality Restoration of hydrologic function Prioritize restoration work based on new or improved information Aquatic strongholds and high priority restoration areas would be identified and guidance provided for verifying broad-scale information described by the Columbia Basin Implementation Strategy at appropriate local scales. Up to 70,000 acres would be treated to reduce junipers within aquatic strongholds , and verified high priority watersheds in the upper Crooked River subbasin to improve hydrologic function, water quality and quantity, and riparian and aquatic conditions.
Fire and Fuels	Designate a Wild land Urban Interface (WUI) area adjacent to identified Communities at Risk. Reduce hazardous fuels within those areas and provide a safe environment for firefighters. Expected treatments of over 83,000 acres over the next fifteen years
Special Management Areas	ACECs Eliminate a section of the Wagon Roads ACEC. Add an ACEC designation to two sections of other historic roads and a portion of the historic Tumalo irrigation canals . Eliminate ACEC designation for the Lower Crooked River ACEC About 2600 acres would be eliminated from ACEC designation, and about 1800 acres added common to Alternatives 2-7. Would drop Badlands ACEC designation if Badlands is designated wilderness Harvest of special forest and range products would be limited to restoration treatments and/or consistent with the values of the ACEC.. Disposal of BLM administered lands would not be permitted R & PP leases within ACECs would be limited to non-patent leases that would not impair the values for which the ACEC was designated. Manage the Wagon Road and Tumalo ACECs with an emphasis on interpretation of the historic resources Close all or portions of the areas to uses that are likely to adversely affect those resources. Change travel mgt. from limited to existing roads to closed for Powell Butte ACEC Wilderness Study Areas (WSA) Establish locatable boundaries for Wilderness Study Areas Specify closures for activities that could concentrate or leave evidence of human uses in Wilderness Study Areas. Cave resources Protect the basic integrity of the system and potential cave biota in caves not determined to be significant caves under the Federal Cave Resources Protection Act. Significant Caves Caves nominated or determined to be significant under the Federal Caves Resources Protection Act would have common general guidance for promoting cave integrity and conditions under which human uses would be allowed, including closing caves to specific activities that are likely to have an adverse effect on cave resources. Additional specific guidance would be provided for Redmond and Pictograph caves.

Land Uses

Livestock Grazing	Provide guidance for continued livestock grazing, and a formula for estimating potential for conflicts between livestock grazing and other uses both on and adjacent to public. Provide guidance for livestock grazing around Mayfield Pond and within the Peck's Milkvetch ACEC. The area immediately surrounding the Tumalo Canals within the Tumalo Canal ACEC would be closed to livestock grazing in Alternatives 2-7.
Minerals	Establish a framework for considering conflict and demand factors for salable minerals similar to that used for livestock grazing. Establish stipulations for the salable mineral use consistent with adjacent county stipulations to reduce conflicts with neighbors or other land uses.
Forest and Range Products	Continued designation of the approximately 42,000 acres of commercial forest lands within the planning area. Common management guidance established to promote opportunities for new utilization techniques.
Military Use	Provide for long-term shared use of BLM administered lands by military.
Visual Resources	BLM-administered lands would be classified according to five visual sensitivity categories consistent with BLM policy. These classifications clarify and in some cases change direction that had been identified in the Brothers - La Pine grazing EIS and RMP, and the Middle Deschutes Wild and Scenic River Plan. Badlands WSA, Steelhead Falls WSA, and Horse Ridge RNA/ACEC/ISA are designated VRM Class 1. Provide guidance on how to integrate visual management considerations with other management activities.
Recreation	Most of the planning area would be designated the High Desert Special Recreation Area Provide guidance for establishing defined, safe access points to areas that minimize conflict with neighbors, and for providing information about travel and access management in the area. All action alternatives limit motorized use to designated roads and trails throughout the planning area, and remove the Open designations that are present in Alternative 1 throughout planning area (i.e., cross-country motorized travel would not be allowed). All action alternatives provide new designated non-motorized trails, and provide a framework for defining the amount of separation (either by geographic area or separate trail or road systems) between motorized and non-motorized trail use. All action alternatives provide some common guidance for trail design and construction, provision of day use areas or other facilities, areas or sites managed primarily for interpretation, and management of special recreation permit activities.
Transportation and Utilities	Emphasizes regional and local integrated transportation planning, provides transportation corridor allocations for anticipated needs, and provides a mechanism to reduce the amount of redundant or unneeded roadways. Adopts new utility corridor allocations identified by the Western Utility Group (advisory group consisting of governmental and industry representatives) Identifies potential wind energy development sites

Land Ownership	Identifies lands suitable for acquisition.
Public Health and Safety	Establishes criteria for closing of user-created roads that access habitual, frequently-used dumping sites Institutes campfire closures to reduce the potential for human-caused wildfire in high-risk areas with inconsistent regulations Increases BLM law enforcement ranger authority to improve consistency and enforcement of existing (Oregon state and local) laws Closes BLM land to all firearm discharge, or firearm discharge unless legally hunting in areas of high visitation, in residential areas, to protect natural and cultural resources, and to provide safe and compatible recreation opportunities
Archaeological Resources	Prioritize activities and recommend management actions to prevent loss of significant at-risk archeological resources. Establishes an evaluation procedure that considers immediacy and severity of threat and opportunities for partnerships and cost sharing, and interpretation and public outreach, and identifies appropriate actions to be taken to resolve these threats. This evaluation supports the Tumalo Canal ACEC designation that is also common to Alternatives 2-7.

a greater emphasis on managing for primary or secondary wildlife habitats across the planning area than does Alternative 2.

Alternative 4

Alternative 4 combines the approaches used in Alternatives 2 and 3, and includes more of an emphasis on providing for recreation opportunities (more than Alternative 3, but less than 2) in areas and during seasons when the demand is greatest. This alternative would also place a greater emphasis than Alternative 2 on reducing conflict between land uses and other users or adjacent residents. Recreation uses would be more separated than Alternative 2, but less than Alternative 3, and there would be an emphasis on certain types of recreation over others within geographic subdivisions. ACECs would provide special management objectives that emphasize ecosystem and wildlife habitat management, but these areas would generally be smaller or less frequently distributed across the planning area than in Alternative 3.

Alternative 5

Alternative 5 would utilize the "urban/rural" concept discussed earlier. The emphasis would be to focus reduced or lower conflict activities and higher quality wildlife habitat within the "urban" areas (generally includes most of the planning area within Deschutes and Jefferson counties). There would be limited use of ACEC direction to protect resources, and more reliance on broad-scale conservation approaches across the planning area.

Alternative 6

Alternative 6 takes an approach that, in contrast to Alternative 5, emphasizes the future of effective wildlife habitats outside of the areas most likely to be affected by residential and urban development. This alternative puts less emphasis on reducing conflicts between land uses, recreational users, and residents in the "urban" areas adjacent to residential areas than does Alternative 5. More emphasis is on reduced conflicts between wildlife management objectives and human activities away from residential development areas in the "rural" areas (generally includes most of the planning area within Crook County).

Alternative 7 (Preferred Alternative)

Alternative 7 combines various features of the previous alternatives. It places more of an emphasis on primary and secondary wildlife habitat emphasis areas in the SE or "rural" portion of the planning area in the area of the greatest potential concentrations of species needs, but also allows the opportunity for increased amounts of year-round motorized use in much of that area. It emphasizes more separation of recreational uses than shared uses, and on providing large blocks of contiguous lands relatively equally balanced across the planning area for those separated recreation uses. Alternative 7 would modify the "conflict and demand" threshold criteria used in "Common to Alternatives 2-7" to determine areas available for continued grazing use during the life of the plan.

Rationale for Identification of the Preferred Alternative

The Preferred Alternative builds on areas of consensus during the planning effort and reflects a balance of uses that would meet the needs of local communities as well as national mandates for management of public lands. It provides a mix of management emphases that recognizes the individual identities and social and economic values of the local communities. It will meet long term military training needs and provide a flexible framework for managing livestock grazing that responds to changing conflicts and demands. The Preferred Alternative would provide reasonable mitigation for urban

and rural residents while still providing for traditional uses like livestock grazing and salable mineral material site development. It would provide for separated motorized and non-motorized recreation uses that are roughly equal across the planning area, and which offer recreational opportunities near urban areas as well as on larger blocks of public lands farther from urban centers. The Preferred Alternative would integrate recreation and wildlife management objectives throughout the planning area.

The Preferred Alternative also includes elements that support current scientific approaches to ecosystem management and an aggressive approach to management of hazardous fuels in the urban interface. It would establish a proactive framework for managing present and future at-risk significant archeological resources. It would also include an approach for determining future areas available for firearm use integrated with local governments, reduce risks to neighbors and provide for firearm uses that would complement desired recreation experiences.

Table ES-3 Comparison of Alternatives 2-7

Issue Category	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
Ecosystem Health/Diversity							
Vegetation							
Vegetation Management Emphasis		Current Distribution	Historic Range of Variability	Same as 2	Same as 2	Same as 3	Same as 3
Changes in Vegetation Priority Treatment Areas (Acres)[1]:				Same as 2	Same as 2	Same as 3	Same as 3
WUI		*83,727	*83,727				
Verified High Priority Restoration (Lower Crooked River Subbasin)		0	45,098				
Verified High Priority Restoration (Upper Crooked River Subbasin)		*40,746	*40,746				
Aquatic Stronghold Restoration		*29,722	*29,722				
Canyon Treatment		5,883	0				
Priority Old-Growth Juniper Rest.		*12,317	*56,611				
Peck's Milkvetch Treatment Area		323	0				
Ponderosa Pine		*5,766	*5,766				
Priority Sage Grouse Restoration		*94,412	*127,276				
Mule Deer Winter Range Restoration.		15,684	0				
Total Veg. Treatment(15 years)[2]	**71,000**	***168,310**	***230,250**				
Fire/Fuels Management							
Estimated acres annual prescribed fire treatments							
Year 1 – 5	2,580	1,265	3,838	Same as 2	Same as 2	Same as 3	Same as 3
Year 6 – 15	2,580	5,253	9,210				
Estimated annual mechanical treatment acres (includes WUI)							
Year 1 – 5	2,150	11,385	11,512	Same as 2	Same as 2	Same as 3	Same as 3
Year 6 - 15	2,150	5,253	6,140				

Wildlife							
Crucial Winter Range	None identified	None designated	None designated	None designated	None designated	None designated	
Source habitats	None identified	Current Distribution	Historic Range of Variability	Current Distribution	Current Distribution	Historic Range of Variability	Historic Range of Variability
Wildlife Emphasis -- Acres / %[3]							
Primary[4]	160,000 / 40%	99,000 / 25%	256,000 / 63%	159,000 / 39%	117,000 / 29%	218,000 / 54%	244,000 / 61%
Secondary	55,600 / 14%	22,000 / 5%	57,000 / 14%	31,000 / 8%	134,000 / 33%	29,000 / 7%	33,000 / 8%
Minor	187,000 / 46%	281,000 / 70%	91,000 / 23%	214,000 / 53%	153,000 / 38%	156,000 / 39%	126,000 / 31%
Special Management Areas							
ACEC Designated Acres							
Wagon Roads	*75	*875	*875	*875	*875	*875	*875
Badlands	*16,684	*16,684	*16,684	*16,684	*16,684	*16,684	*16,684
Horse Ridge RNA	*609	*609	*609	*609	*609	*609	*609
Powell Butte RNA	*510	*510	*510	*510	*510	*510	*510
Peck's Milkvetch	*4,073	*4,073	*4,073	*4,073	*11,144	*11,144	*10,325
Alfalfa Market Road	0	0	4,200	4,200	0	0	0
Juniper Woodlands	0	0	31,011	6,756	0	0	0
Sage Grouse	0	0	0	16,257	0	0	0
Smith Rock	0	0	2,119	0	0	2,119	0
Tumalo Canal	0	1,050	0	0	1,050	1,050	1,050
Lower Crooked River	2,592	0	0	0	0	0	0
Total ACEC Acres	**24,543**	**23,801**	**60,081**	**49,964**	**30,872**	**32,991**	**30,053**
Land Uses							
Livestock Grazing							
Acres available for livestock grazing[5]	388,823	388,271	388,271	348,394	228,685	347,522	279,321
AUMs / Number of Allotments[6]							
Available (Open)	25,816 / 124	25,747 / 124	23,747 / 124	23,471 / 86	13,286 / 61	24,308 / 115	21,310 / 86
Available as RFA[7]	0	0	0	0	0	0	1,967[9] / 10
RFA or not available (Closed)[8]	0	0	0	0	0	0	1,779[10] / 22
Not available (Closed)	0	69 / 0	69 / 0	2,345 / 38	12,530 / 63	1,508 / 9	760[11] / 6

Minerals							
Land available for mineral sales Acres / %	403,910 / 100%	342,108 / 85%	339,989 / 84%	328,681 / 81%	304,708 / 75.3%	339,989 / 84%	342,108 / 85%
Land available for Locatable Mineral Entry	*403,910 / 100%	*403,910 / 100%	*403,910 / 100%	*403,910 / 100%	*403,910 / 100%	*403,910 / 100%	*403,910 / 100%
Land available for Mineral Leasing	*374,365 / 93%	*374,365 / 93%	*374,365 / 93%	*374,365 / 93%	*374,365 / 93%	*374,365 / 93%	*374,365 / 93%
Special Forest/Range Products							
Estimated volume (ccf / mbf)	500 ccf / 250 mbf	1200 ccf / 600 mbf	1500 ccf / 750 mbf	Same as 2	Same as 2	Same as 3	Same as 3
Military							
Land available for military use Acres / %	29,744 / 7%	36,397 / 9%	21,207 / 5%	26,194 / 6%	29,760 / 7%	55,665 / 14%	50,600 / 13%
Recreation							
Recreation Emphasis -- Acres / %							
Mixed Use/shared facilities	31,600 / 78%	312,000 / 77%	157,000 / 39%	235,000 / 58%	211,000 / 52%	166,000 / 41%	153,000 / 38%
Mixed Use/separate facilities	0	0	29,000 / 7%	0	41,000 / 10%	31,000 / 8%	27,000 / 7%
Non-motorized Emphasis	42 />1%	58,500 / 14%	65,500 / 16%	122,000 / 32%	86,000 / 21%	69,000 / 17%	87,000 / 21%
Non-motorized Exclusive	11,000 / 3%	26,000 / 6%	82,000 / 20%	28,000 / 7%	55,000 / 13%	34,000 / 21%	88,000 / 22%
Roads Only, low Rec emphasis	76,000 / 19%	5,270 / 2%	68,000 / 17%	16,000 / 4%	10,000 / 2%	51,000 / 13%	47,000 / 12%
Non-Rec Emphasis	0	1,500 / 1%	1,400 />1%	1,500 />1%	400 />1%	1500 />1%	1500 />1%
Travel Management Designation							
Designated Open (Acres / %)	153,600 / 38%	0	0	0	0	0	0
Motorized use limited to existing roads and trails	95,000 / 23%	0	0	0	0	0	0
Designated Closed[12]	6,550 / 2%	20,370 / 5%	75,960 / 19%	23,473 / 6%	48,016 / 12%	78,429 / 20%	91,000 / 23%
Motorized use limited to designated roads or designated roads and trails	80,500 / 20%	371,000 / 92%	213,234 / 54%	309,703 / 78%	247,185 / 61%	205,454 / 52%	240,000 /60%
Motorized use limited to designated roads or designated roads and trails – seasonally	47,000 / 12% (15,400 / 4% closed depending on snow depth)	11,500 / 3%	89,133 / 22% (19,846 /5% closed depending on snow depth)	65,094 / 16%	107,801 / 27%	113,928 / 28%	67,000 / 17%
Motorized use limited to existing roads and trails seasonally	4,600 / 1%	0	0	0	0	0	0
Land Ownership							
Z-1 (Retain)	206,201 / 51%	359,690 / 89%	357,598 / 89%	327,335 / 81%	322,693 / 80%	344,406 / 86%	310,272 / 77%
Z-2 (Retain, may exchange)	175,523 / 44%	23,082 / 6%	34,829 / 8%	57,488 / 14%[14]	66,713 / 17%	39,693/ 10%[17]	83,812 / 21%
Z-3 (Dispose)	15,422 / 4%	12,639 / 3%	7,456 / 2%	9,669 / 3%	7,821 / 2%	13,789 / 3%	5,107 / 1%
Community Expansion	5,617 / 1%	7,592 / 2%	3,121 / 1%[13]	8,512 / 2%[15]	5,776 / 1%[16]	5,115 / 1%[18]	4,882 / 1%[19]

Transportation and Utilities							
Road designation by miles							
Arterial	224	224	212	224	225	224	224
Collector	302	302	104	104	104	104	104
Local	2,562	2,562	2,808	2,808	2,808	2,808	2,808
Public Health and Safety							
Closed to all firearms discharge[20]	[21]710 />1%	*4,779 / >1%	*8,418 / 2%	*8,418/ 2%	*8,418 / 2%	*6,411/ 2%	*10,500 / 3%
Closed to all firearms discharge unless legally hunting	3,646 / 1%	*19,687 / 5%	*120,333 /30%	*22,236 / 6%	*109,010 /27%	*57,674/ 14%	*82,631 / 20%

[1] For this table, all acreages are approximate.
[2] Due to overlap of priority treatment areas, these categories will not add up to the Total Vegetation Treatment acres.
*Acres include acreage Common to All Alternatives and Common to Alternatives 2-7.

[3] Percentages in this table indicate percentage of the Planning Area that is under BLM jurisdiction.
[4] Alternative 1 does not use the concepts of "primary, secondary, or minor" for wildlife habitat emphasis. An area of B/LP RMP acres with management direction similar to that under the new "primary" designation was used to compare the alternatives.
[5] The available acres are not 100% of the acres in the planning area; several thousand acres remain unavailable to grazing in all alternatives.
[6] Allotments were counted as Open if any portion of the allotment remains Open in the alternative. Number of allotments counts La Pine unallotted as one allotment.
[7] RFA = reserve forage allotment (see text for description)
[8] The "Close or RFA" column is a management discretion category.
[9] This figure assume the permittees voluntarily relinquish their permits. If they don't, the figures would drop to 0 and "open" would increase correspondingly.
[10] *ibid*
[11] *ibid*
[12] Areas designated closed are closed to vehicles off of roads. In some closed areas, motorized use on roads is allowed.
[13] Designation applies only to parks, green belts, and open spaces.
[14] Exchanges must be for equitable habitat and recreational values; exchanges between large blocks near Bend/Redmond are for the purpose of blocking up or creating corridors between large blocks.
[15] Proposed projects would include interconnecting open spaces.
[16] *Ibid.*
[17]Exchanges must be for equitable habitat and recreational values; exchanges between large blocks near Bend/Redmond are for the purpose of blocking up or creating corridors between large blocks.
[18] Designation applies only to parks, green belts, open spaces, open recreation spaces, and open community infrastructure needs.
[19] Designation applies only to parks, green belts, open spaces, open recreation spaces, and open community infrastructure needs for the Sawtooth area on Hwy. 97.
[20]290 of these acres include seasonal raptor closures.
[21]Firearms closure figures for all alternatives are inclusive of 590 common acres closed to all firearms discharge, and 527 common acres closed to all firearms discharge unless legally hunting.

Acronyms and Abbreviations

ACEC	Area of Critical Environmental Concern
ADT	Average Daily Traffic
AMP	Allotment Management Plan
AMS	Analysis of the Management Situation
ARPA	Archaeological Resources Protection Act
ASCO	Archaeological Society of Central Oregon
ASQ	Allowable Sale Quantity
ATV	All Terrain Vehicle
AUM	Animal Unit Month
BA	Biological Assessment
BECA	Bald Eagle Consideration Area
BEMA	Bald Eagle Management Area
BLM	Bureau of Land Management
BMP	Best Management Practices
BOR	Bureau of Reclamation
BS	Bureau Sensitive
CAA	Clean Air Act
CAFO	Confined Animal Feeding Operations
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
COSSA	Central Oregon Shooting Sports Association
CRNG	Crooked River National Grassland
CRR	Crooked River Ranch
CWA	Clean Water Act
DBH	Diameter at Breast Height
DEIS	Draft Environmental Impact Statement
DEQ	Department of Environmental Quality (Oregon)
DNF	Deschutes National Forest
DOI	Department of Interior
DOGAMI	Department of Geology and Mineral Industries (Oregon)
DR	Decision Record
DRMP	Draft Resource Management Plan
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act
FCRPA	Federal Cave Resources Protection Act
FEIS	Final Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
FR	Federal Register
FS	Forest Service
FWS	Fish and Wildlife Service
FY	Fiscal Year
GIS	Geographic Information System
HCA	Habitat Conservation Areas
HCP	Habitat Conservation Plan
HMP	Habitat Management Plan
IBLA	Interior Board of Land Appeals
ICBEMP	Interior Columbia Basin Ecosystem Management Project
IDT	Interdisciplinary Team
IMP	Interim Management Policy for Lands Under Wilderness Review
ISA	Instant Study Area
IWM	Integrated Weed Management Program
KLA	Known Linkage Area
LAU	Lynx Analysis Units
LWCF	Land and Water Conservation Fund

MBF	Thousand Board Feet
MMBF	Million Board Feet
MO	Management Objectives
MOU	Memorandum of Understanding
NF	National Forest
NHPA	National Historic Preservation Act
NEPA	National Environmental Protection Act
NRHP	National Register of Historic Places
NSS	National Speleological Society
OAR	Oregon Administrative Rules
ODA	Oregon Department of Agriculture
ODEQ	Oregon Department of Environmental Quality
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
OEF	Oregon Eagle Foundation
OHV	Off-Highway Vehicle
OMD	Oregon Military Department
ONHP	Oregon Natural Heritage Program
OPRD	Oregon State Parks and Recreation Department
ORV	Off-Road Vehicle or Outstandingly Remarkable Value
OSU	Oregon State University
PFC	Proper Functioning Condition
PNW	Pacific Northwest
R&PP Act	Recreation and Public Purposes Act
RCA	Riparian Conservation Area
RD	Ranger District
RMO	Riparian Management Objective
RMP	Resource Management Plan
RNA	Research Natural Area
ROD	Record of Decision
ROW	Right of Way
RV	Recreational Vehicle
SCORP	Statewide Comprehensive Outdoor Recreation Plan
S&Gs	Standards & Guidelines
SHPO	State Historical Preservation Office
SOC	Species of Concern
SR	State Route
SRMA	Special Recreation Management Area
SRP	Special Recreation Permit
SUP	Special Use Permit
SVIM	Soil-Vegetation Inventory Method
SWCD	Soil and Water Conservation District
TCP	Traditional Cultural Property
T&E	Threatened and Endangered
TGA	Taylor Grazing Act of 1934
TNC	The Nature Conservancy
TMDL	Total Maximum Daily Load
USC	United States Code
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VQO	Visual Quality Objectives
VRM	Visual Resource Management
WSR	Wild and Scenic River
WSA	Wilderness Study Areas
WSRA	Wild and Scenic Rivers Act
WUI	Wildland Urban Interface

Glossary

Abiotic - pertaining to the non-living parts of an ecosystem, such as soil, rock, air, and water.

Access - the ability of public land visitors to reach the areas they wish to visit.

Access Statement - a legal right to cross the land granted to the public by a landowner.

ACEC (Area of Critical Environmental Concern) - a type of special land use designation specified within the Federal Land Policy and Management Act (FLPMA) used to protect areas with important resource values in need of special management.

Acre - a unit of area used in land measurement, equal to 43,560 square feet. There are 640 acres in one square mile.

Advisory Council on Historic Preservation - established by the National Historic Preservation Act of 1966 to play a key role in the evaluation, nomination, and treatment of National Register properties.

Allotment - a specific portion of public land allocated for livestock grazing, typically with identifiable or fenced boundaries and permitted for a specified number of livestock.

AMP (Allotment Management Plan) - a BLM document that directs the management of livestock grazing on a specific area of public land.

AMS (Analysis of the Management Situation) - Step 4 of the BLM's land use planning project; a comprehensive documentation of the present conditions of the resources, current management guidance, and opportunities for change.

Andesite - volcanic rock with a silicon dioxide (SiO_2) composition between 52 and 63% by weight. Its color is gray to black and it erupts at temperatures between 900 and 1100° C.

Appropriate (Fire) Management Response - specific actions taken in response to a wildland fire to implement protection and fire use objectives.

Area of Traditional Cultural Significance - for the purposes of this plan, those locations used by Indian people to maintain their values, beliefs, and cultural identity, including, but not be limited to, traditional plant collecting areas, fishing stations, or places for practicing traditional religious beliefs.

Ash - volcanic material consisting of rock, volcanic glass, and mineral fragments less than 2 mm in diameter.

ASQ (Allowable Sale Quantity) - the quantity of timber that may be sold from an area covered by a forest management plan during a time period specified by the plan. ASQ is usually expressed as an average annual quantity.

AUM (Animal Unit Month) - the amount of forage required to sustain one cow and calf for one month.

Basalt - a dark-colored volcanic rock with less than 52% silicon dioxide by weight. Its temperature when erupting ranges from 1100 to 1250°C. Basalt is less viscous (more fluid) than andesite and rhyolite and is capable of flowing several tens of kilometers.

Biodiversity (Biological Diversity) – the variety and variability among living organisms and the ecological complexes in which they occur (ICBEMP, 2000).

Biomass - dry weight of organic matter in plants and animals in an ecosystem, both above and below ground.

Biotic - living.

BLM (Bureau of Land Management) - government agency with the mandate to manage Federal lands under its jurisdiction for multiple uses.

BMPs (Best Management Practices) - a set of practices which, when applied during implementation of management actions, ensures that negative impacts to natural resources are minimized. BMPs are applied based on site-specific evaluations and represent the most effective and practical means to achieve management goals for a given site.

Board Foot - the amount of wood contained in an unfinished board one inch thick, 12 inches long, and 12 inches wide, commonly abbreviated BF; MBF = one thousand board feet; MMBF = one million board feet.

Broad Scale - a large, regional area, such as a river basin, and typically a multi-state area.

Broadcast Burning - burning natural fuels as they are, with no piling or windrowing.

Bureau Sensitive Species - species eligible as federally listed or candidate status, state listed or candidate (plant) status, or on List 1 in the Oregon Natural Heritage Database, or otherwise approved for this category by the State Director.

Candidate Species - any species included in the Federal Register Notice of Review that are being considered for listing as threatened or endangered by the U.S. Fish and Wildlife Service.

Cell - unique Ecosystem type used by the Oregon Natural Heritage Plan to inventory, classify and evaluate natural areas. Cells contain one or more ecosystem elements, which are assemblages of integrated organisms plus the environment supporting them.

Cinder - a frothy form of basalt formed by expanding gases during an eruption.

Cinder Cone - a cone-shaped volcano created by the accumulation of cinders around a vent, formed as an individual volcano or in groups on the flanks of larger volcanoes.

Cinnabar - mercury sulfide, an ore of mercury.

Climax - the culminating stage of plant succession for a given environment; the vegetation conceived as having reached a highly stable condition.

Collaboration - a formalized process of identifying and involving interactive participants in different parts of the analysis process. Collaboration is expected to result in some level of informed consent by all participants concerning the issues and range of alternatives. For the purposes of this plan, that is intended to include members both exempt from and subject to the Federal Advisory Committee Act.

Communication Site - (1) a hilltop or favorable signal receiving and transmitting location where a collection of facilities are sited; (2) a facility consisting of a small building and tower, used for transmission or reception of radio, television, telephone or other electronic signals.

Conglomerate - a clastic sedimentary rock composed of rounded to sub-angular stones (larger than 2 mm in diameter) cemented in a matrix of sand or silt.

Connectivity (of habitats) - the linkage of similar but spatially separated vegetative stands (such as mature forests) by patches, corridors, or "stepping stones" of like vegetation across the landscape; also, the degree to which similar landscapes are so linked (PNW GTR-328, 1994).

Consultation - formal and informal consultation as defined by laws such as the National Historic Preservation and Endangered Species Acts. Also, any input formally requested for analysis purposes from any internal or external source.

Cooperators – tribal, local, state, or federal agencies with special expertise related to plan issues or that have legal jurisdiction within the planning area.

Critical Habitat -BLM Manual 6840 defines Critical Habitat (CH) as an area designated as such and listed in 50 CFR Parts 17 and 226 and is any air, land, or water area (exclusive of those existing manmade structures or settlements which are not necessary to the survival an recovery of a listed species) and constituent elements thereof, the loss of which would appreciably decrease the likelihood of the survival and recovery of a listed species or a distinct segment of its population. The constituent elements of Critical Habitat include, but are not limited to: physical structure and topography, biota, climate, human activity, and the quality and chemical content of land, water, and air. Critical Habitat may represent any portion of the present habitat of a listed species and may include additional areas for reasonable population expansion. The federal definition of critical habitat is: (i) the specific areas within the geographic area occupied by the species, at the time it is listed ...on which are found those physical and biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protections; (ii) specific areas outside of the geographical area occupied by the species, at the time it is listed ... upon a determination of the Secretary that such areas are essential for the conservation of the species; and (iii) Except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which ca be occupied by the threatened or endangered species (ESA Section 3).

Cultural Resource - material or non-material aspects of human culture which are significant to living cultures, including groups maintaining and preserving their traditions, and academic researchers such as anthropologists and historians.

Disturbance - any event which alters the structure, composition, or function of terrestrial or aquatic habitats (PNW GTR-328, 1994).

EA (Environmental Assessment) - one type of document prepared by Federal agencies in compliance with the National Environmental Policy Act (NEPA) that portrays the environmental consequences of proposed Federal actions that are not expected to have significant impacts on the human environment.

Ecological Integrity - in general, refers to the degree to which all ecological components and their interactions are represented and functioning; the quality of being complete; a sense of wholeness. Areas of high integrity would represent areas where ecological function and processes are better represented and functioning than areas rated as low integrity (ICBEMP, 2000).

Ecology - the science of the inter-relationships between organisms and their environment; from the Greek *Oikos* meaning "house" or "place to live."

Ecosystem - a spatially explicit, relatively homogeneous unit of the earth that includes all interacting organisms and components of the abiotic environment within its boundaries. An ecosystem can be of any size; e.g., a log, pond, field, forest, or the earth's biosphere.

Ecosystem Health - a condition where the parts and functions of an ecosystem are sustained over time. The system's capacity for self-repair is maintained such that goals for uses, values, and services of the ecosystem are met. Also includes forest health, rangeland health, and aquatic system health.

Ecosystem Management - the use of a "whole-landscape" approach to achieve multiple-use management of public lands by blending the needs of people and environmental values in such a way that these lands represent diverse, healthy, productive, and sustainable ecosystems.

Ecotone - a boundary or zone of transition between adjacent communities or environments, such as the boundary between a forest and a meadow or the boundary of a clearcut next to a mature forest stand. Species present in an ecotone are intermixed subsets of the adjacent communities.

EIS (Environmental Impact Statement) - one type of document prepared by Federal agencies in compliance with the National Environmental Policy Act (NEPA) that portrays

the environmental consequences of proposed major Federal actions that are expected to have significant impacts on the human environment (see EA, above).

EMS (Existing Management Situation) - a component of the Analysis of the Management Situation; a description of the existing management direction governing resource management programs of a planning area.

Endangered Species - any species defined under the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range. Listings are published in the Federal Register.

Endemic Species - plants or animals that occur naturally in a certain region and whose distribution is relatively limited to a particular locality (ICBEMP, 2000).

Ephemeral Stream - a stream, or reach of a stream, that flows only in direct response to precipitation. It receives no continuous supply from melting snow or other source, and its channel is above the water table at all times.

Erosion (Accelerated) - erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, e.g., fire, that exposes the surface.

ESI (Ecological Site Inventory) - the basic inventory of present and potential vegetation of BLM rangelands. Ecological sites are differentiated on the basis of soil type and kind, proportion, or amount of plant species.

Extirpated - having become extinct in a specific area while the species as a whole continues to exist elsewhere.

Fine Scale - a single landscape, such as a watershed or subwatershed.

Fire Cycle - the average time between fires in a given area or a given plant community.

Fire Frequency - the return interval of fire.

Fire Preparedness - activities that lead to a safe, efficient, and cost effective fire management program in support of land and resource management objectives through appropriate planning and coordination.

Fire Regime - the frequency, predictability, intensity, seasonality, and extent characteristics of fires in an ecosystem.

Flood Plain - A relatively flat area that borders a stream that is composed of deposited materials from the stream and is subject to periodic flooding unless protected artificially.

FLPMA (Federal Land Policy and Management Act of 1976) - a law mandating that the Bureau of Land Management manage lands under its jurisdiction for multiple uses.

FMP (Fire Management Plan) - a strategic plan that defines a program to manage wildland and prescribed fires and documents the Fire Management Program in the approved land use plan. The plan is supplemented by operational procedures such as preparedness plans, preplanned dispatch plans, prescribed fire plans and prevention plans.

Forestland - land stocked with at least 10 percent live trees or land formerly having such tree cover and not currently developed for non-forest use.

Functional-At-Risk - riparian-wetland areas that are in functional condition, but an existing soil, water, or vegetation attribute makes them susceptible to degradation.

Game Species - wildlife species hunted for sport.

Ground Water- water filling all the unblocked pores of the material below the water table.

Habitat Fragmentation - the splitting or isolating of patches of similar habitat, typically forest cover (but could also apply to grass fields, shrub patches, and other habitats).

Habitat can be fragmented from natural conditions, such as thin or variable soils, or from management activities or development such as clearcut logging, agriculture, or residential development.

Historic Condition - as used in this text, the condition of lands and ecosystems prior to European settlement. In central Oregon, European settlement occurred during the period from approximately 1850s to 1900. An approximation of these conditions is drawn from written and photographic accounts from the period and is used to determine the range of variability for plant and animal species across a landscape (Ochoco NF Viable Ecosystems Management Guide, 1994).

Historic Range of Variability (HRV) - the typical fluctuations of processes or functions, and the typical proportions of ecosystem elements in an area over a period of time when the ecosystem was not significantly affected by European settlement and management. HRV is the amplitude or minimum-maximum ranges of "natural" conditions.

ICBEMP (Interior Columbia Basin Ecosystem Management Project) - a project conducted during the 1990s and early 2000s examining the effects (on a large, regional scale) of past and present land use activities on the Interior Columbia River Basin ecosystem and a small part of the Great Basin ecosystem.

Ignimbrite - a volcanic rock formed by the welding together of tuff material from an explosive volcanic eruption.

Information Sharing - a process designed to keep everyone informed about what is happening in the planning effort. This includes but is not limited to published material on a variety of media, and management and public briefings and/or presentations.

Initial (Fire) Attack - an aggressive fire suppression action consistent with fire fighter and public safety and values to be protected.

Interdisciplinary - involving more than one discipline or resource management program.

Intermittent Stream - a stream, or reach of a stream, that flows for prolonged periods only when it receives groundwater discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Issue - an opportunity, conflict, or problem about use or management of public land resources. The resolution of issues is the basis for preparing the resource management plan.

Landscape - all the natural features which distinguish one part of the land from another. A spatially heterogeneous area with repeating patterns, similar climate, and landform, and the associated disturbance regimes.

Lava tube - a cave formed by the draining of molten lava from a channel covered by a surficial crust.

Leasable Minerals – minerals that may be leased to private interests by the Federal government and includes oil, gas, geothermal, coal, and sodium compounds.

Leave Tree – a tree left standing in an area where thinning or harvest has occurred.

Litter - the dead remains of plants, usually lying on the soil surface.

Loam - a soil textural class composed of roughly equal amounts of sand, silt, and clay.

Locatable Minerals - minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

Management Concern - procedures or land-use allocations that do not constitute issues but, through the RMP/EIS preparation process, are recognized as needing to be modified or needing decisions made regarding management direction.

Management Opportunities - a component of the analysis of the management situation; actions or management directions that could be taken to resolve issues or management concerns.

Mesic - pertaining to sites or habitats characterized by intermediate moisture conditions, i.e., neither decidedly wet nor dry.

MFP (Management Framework Plan) – an older generation of land use plans developed by the Bureau of Land Management. This generation of planning has been replaced by the Resource Management Plan (RMP).

Microbiotic Crusts - lichens, mosses, green algae, fungi, cyanobacteria, and bacteria growing on or just below the surface of soils.

Mineral Estate - refers to the ownership of minerals at or beneath the surface of the land.

Minor Wildlife Emphasis - designated areas where wildlife typically receives a lower level of consideration to most other resource management programs. Generally, guidelines are tied to minimum legal requirements identified in the sections on "common" guidance (Standards for Rangeland Health, BLM Special Status Species Policy (6840)), and the Threatened and Endangered Species Act.

Mitigating Measures - modifications of actions that (a) avoid impacts by not taking a certain action or parts of an action, (b) minimize impacts by limiting the degree or magnitude of the action and its implementation, (c) rectify impacts by repairing, rehabilitating, or restoring the affected environment, (d) reduce or eliminate impacts over time by preservation and maintenance operations during the life of the action, or (e) compensate for impacts by replacing or providing substitute resources or environments.

Monitoring and Evaluation - the collection and analysis of data to evaluate the progress and effectiveness of on-the-ground actions in meeting resource management goals and objectives.

Multiple Use – the management of public land and its resources to best meet various present and future needs of the American people. This means coordinated management of resources and uses.

NEPA (National Environmental Policy Act of 1969) - a law requiring all Federal agencies to evaluate the impacts of proposed major Federal actions with respect to their significance on the human environment.

Non-functional - riparian-wetland areas that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows, and thus are not reducing erosion, improving water quality, etc.

Non-game Species - wildlife species which are not hunted for sport.

Noxious Weed - a plant specified by law as being especially undesirable, troublesome, and difficult to control.

NRHP (National Register of Historic Places) - established by Congress with the passage of the National Historic Preservation Act of 1966, an ever increasing, formal list of sites that are culturally significant according to specific criteria.

NWR (National Wildlife Refuge) - an area administered by the U.S. Fish and Wildlife Service for the purpose of managing certain fish or wildlife species.

Obsidian - a volcanic glass with a bulk composition equivalent to that of rhyolite except that obsidian has a lower water content.

OHV (Off Highway Vehicle) - unless otherwise stated, this generally refers to Class I all-terrain vehicles, Class II full width four-wheel drive vehicles, and Class III motorcycles.

Old-growth - old forest often containing several canopy layers, variety in tree sizes and species, decadent old trees, standing and down dead woody material (PNW GTR-328, 1994).

Overstory - the upper canopy layer; the plants below comprise the understory.

Patch - an area of vegetation with homogeneous composition and structure.

Perennial Stream -a stream that flows continuously. Perennial streams are generally associated with a water table in the localities through which they flow.

Perlite - a volcanic glass with an equivalent composition to that of rhyolite but with a higher water content than obsidian.

PFC (Proper Functioning Condition) - adequate vegetation, land form, or large woody debris present to dissipate stream or wave energy, filter sediment and capture bedload, improve flood water retention, develop root masses that stabilize stream banks, islands and shorelines, develop channel characteristics to provide habitat for aquatic species, support greater biodiversity, reduce erosion, and improve water quality.

Planning Area – the entire block of land that encompasses BLM-administered lands.
Plant Association - the distinctive combination of trees, shrubs, grasses, and herbs occurring in a theoretical terminal or climax community or a series of communities (PNW GTR-328, 1994).

Potential Natural Vegetation - an historical term originally defined by A.W. Kuchler as the stable vegetation community which could occupy a site under current climatic conditions without further influence by humans. Often used interchangeably with Potential Natural Community.

Potential Plant Community - one of several plant communities that may become established on an ecological site under the present environmental conditions, either with or without interference by humans.

Preferred Alternative or Plan - the alternative plan in the Draft EIS that the agency has initially selected that best fulfills the agency's statutory mission and responsibilities and offers the most acceptable resolution of the planning issues and management concerns.

Prescribed Fire - the introduction of fire to an area under regulated conditions for specific management purposes (usually vegetation manipulation).

Prescribed Natural Fire – a fire caused by lightning for which minimal to no suppression action is taken if it is under pre-determined conditions and within acceptable parameters. Prescribed natural fire is used to accomplish certain resource objectives.

Pressure Ridge - a ridge formed during inflation of a basalt flow, often having one or more prominent tension cracks along the ridge axis.

Primary Wildlife Emphasis - designates that wildlife is one of the most important management considerations for an area. Areas allocated to primary emphasis are intended to benefit wildlife and retain high wildlife use by applying specific guidelines (see Chapter 2).

Public Land - any land or interest in land owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management.

Public Participation - a process designed to inform and involve all people and organizations not otherwise involved in the planning effort through Consultation, Cooperation, or Collaboration. Involvement includes opportunities to comment on preliminary and draft published materials, general public information or comment meetings, and periodic receipt of update material.

Pumice - a frothy, lightweight form of volcanic glass formed from expanding gasses in a rhyolite magma.

R&PP Act (Recreation and Public Purposes Act) - an act passed by Congress which allows state and local governments and nonprofit organizations to lease and eventually acquire title to public lands for recreational or community expansion and other public purposes. The act was passed in recognition of the strong public need for a nationwide

system of parks and historic preservation areas along with lands for other public purposes such as schools, fire houses, law enforcement facilities, municipal facilities, land fills, hospitals, and fairgrounds.

RAP (Resource Area Profile) - a component of the analysis of the management situations; a description of the current condition, amount, location, use and demands of the natural resources in a planning area.

Resilience – 1) the ability of a system to respond to disturbances. Resiliency is one of the properties that enable the system to persist in many different states or successional stages; 2) in human communities, refers to the ability of a community to respond to externally induced changes such as larger economic forces.

Resource Area - the "on-the-ground" management unit of the Bureau of Land Management comprised of BLM-administered land within a specific geographic area.

Restoration - as used in this text, vegetative treatments used to modify an ecosystem and designed to return plant and animal communities *toward* a condition and level of functioning that existed prior to human disturbance or influence.

Rhyolite - a light colored volcanic rock with a silicon dioxide composition greater than 68% by weight. It commonly exhibits flow banding and its temperature when erupting ranges from 700 and 850°C.

Right-of-Way - a grant that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, and reservoirs.

Riparian - a form of wetland transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels are typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil."

RMP (Resource Management Plan) - current generation of land use plans developed by the BLM under the Federal Land Policy and Management Act. Replaces the older generation Management Framework Plans. Provides long-term (up to 20 years) direction for the management of a particular area of land, usually corresponding to a BLM resource area, and its resources.

RNA (Research Natural Area) - an area of significant scientific interest that is designated to protect its resource values for scientific research and study. Under current BLM policy, these areas must meet the relevance and importance criteria of ACECs and are designated as ACECs.

Sacred site- means any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site (Executive Order 13007, 1996:1).

Salable Minerals - high volume, low value mineral resources including common varieties of rock, clay, decorative stone, sand, gravel, and cinder.

Scenic Corridor - an area of special aesthetic values, including scenic vistas, unusual geologic or vegetative features, or other natural elements.

Scenic River - a river or section of a river that is free of impoundments and whose shorelines are largely undeveloped but accessible in places by roads.

Scoping - the process of identifying the range of consideration, issues, management concerns, preliminary alternatives, and other components of an environmental impact

statement or land-use planning document. It involves both internal and external, or public, involvement.

Secondary Wildlife Emphasis – a designation where wildlife is one of several resource management programs that are of focus in an area, and typically receive a slightly lower, but still significant, level of management consideration. Areas allocated to a secondary emphasis are intended to support wildlife and maintain a moderate amount of use, as outlined in Chapter 2.

Seral Stage - the rated departure of a plant community from a described potential natural community (PNC) for a specific ecological site. *Low-seral* stage is an existing plant community which is defined as 0-25% comparability to the defined PNC; *Mid-seral* stage is an existing plant community which has 26-50% comparability to the PNC; *Late seral* stage is 51-75% comparable to the PNC; PNC is an existing plant community with 76-100% comparability to the defined PNC.

Shield Volcano - a gentle-sloped volcano built primarily by successive low-viscosity basalt flows. Has a shield-shaped profile.

Silviculture - the practice of manipulating the establishment, composition, structure, growth, and rate of succession of forests to accomplish specific objectives.

Site Condition - the level of condition, or degree of function, used to express the current condition of a site in contrast to site potential.

Site Potential - a measure of resource availability based on interactions among soils, climate, hydrology, and vegetation. Site potential represents the highest ecological status an area can attain given no political, social, or economic constraints. It defines the capability of an area, its potential, and how it functions (ICBEMP, 2000).

Snag - a standing dead tree, usually larger than five feet tall and six inches in diameter at breast height. Snags are important as habitat for a variety of wildlife species and their prey.

Special Status Species – a plant or animal species falling into any one of the following categories: Federally listed threatened or endangered species, species proposed for Federal listing as threatened or endangered, candidate species for Federal listing, State listed species, Bureau sensitive species, Bureau assessment species (see separate definition for each).

Species Diversity - the number, different kinds of, and relative abundances of species present in a given area.

Stand - a contiguous group of similar plants. For forest use, a contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

State Listed Species - any plant or animal species listed by the State of Oregon as threatened or endangered within the state under ORS 496.004, ORS 498.026, or ORS 564.040.

Structure - the physical organization and arrangement of vegetation; the size and arrangement (both vertical and horizontal) of vegetation.

Sub-basin Review - an interagency, collaborative consideration of resources, resource management issues, and management recommendations for one or more subbasins or watershed drainages approximately 800,000 to 1,000,000 acres in size.

Succession - the gradual supplanting of one community of plants by another. The sequence of communities is called a *sere*, or *seral stage.* A process of changes in structure and composition of plant and animal communities over time. Conditions of the prior plant community or successional stage create conditions that are favorable for establishment of the next stage. The different stages in succession are often referred to as seral stages.

Sustainability – 1) meeting the needs of the present without compromising the abilities of future generations to meet their needs; emphasizing and maintaining the underlying ecological processes that ensure long-term productivity of goods, services, and values without impairing productivity of the land; 2) in commodity production, refers to the yield of a natural resource that can be produced continually at a given intensity of management (ICBEMP, 2000).

Sustained Yield - maintenance of an annual or regular periodic out put of a renewable resource from public land consistent with the principles of multiple use. Also: The yield that a forest can produce continuously at a given intensity of management. Sustained yield management implies continuous production, so planned as to achieve, at the earliest practical time, a balance between increment and cutting.

Tephra - a descriptive term for materials ejected from volcanoes including ash, pumice, cinders, and volcanic bombs.

Terrestrial - pertaining to the land.

Thermal Cover - cover used by animals to protect them against the weather.

Threatened Species - any plant or animal species defined under the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Listings are published in the Federal Register.

Timberland - forestland capable of continuously producing 20 cubic feet or more per acre of industrial wood.

TNC (The Nature Conservancy) - a private national organization dedicated to the preservation of biological diversity.

Tuff - a volcanic rock formed by the welding together of ash and rock fragments from an explosive volcanic eruption.

Underburn - burning by a surface fire, usually under a tree canopy.

Understory - collectively, those plants that are beneath the overstory. See overstory.

Upland - the portion of the landscape above the valley floor or stream.

USDI (U.S. Department of Interior) - government department which oversees the Bureau of Land Management and many other agencies.

USFWS (U.S. Fish and Wildlife Service) - government agency responsible for managing fish and wildlife and their habitats.

Vegetative Composition - the plant species present in a plant community.

Vent - an opening at the Earth's surface through which volcanic materials are erupted.

Viability - in general, the ability of a population of a plant or animal species to persist for some specified time into the future. For planning purposes, a viable population is one that has the estimated numbers and distribution of reproductive individuals to ensure that its continued existence will be well distributed in the planning area (ICBEMP, 2000).

Visual Resources - the aesthetic qualities of the landscape. This is determined by assessing the scenic quality of a site, the sensitivity of people to changes in the landscape, and the visibility of the landscape from major viewing routes and key observation points.

Watershed - the region draining into a river, river system, or body of water. A fifth-field hydrologic unit code of the U.S. Geologic Survey (USGS) comprising 50,000 to 100,000 acres.

Weed - a plant considered undesirable, unattractive, or troublesome, usually introduced and growing without intentional cultivation. See also Noxious Weed.

WFSA (Wildland Fire Situation Analysis) - a decision-making process that evaluates alternative management strategies against selected safety, environmental, social,

economical, political, and resource management objectives as selection criteria.

Wild River - a river or section of a river that is free of impoundments and generally inaccessible except by trail, with watersheds and shorelines essentially primitive and waters unpolluted.

Wilderness - an area that is essentially natural in character that has been designated by Congressional action in order to preserve that naturalness.

Wildfire - any unwanted wildland fire.

Wildland Fire - any non-structure fire, other than prescribed fire, that occurs in the wildland.

Woodland - a plant community in which, in contrast to a typical forest, the trees are often small or short-boled relative to their crown width or height. Collectively, the trees form an open canopy with the intervening area occupied by lower vegetation, commonly grass or shrub.

WSA (Wilderness Study Area) - public land under the jurisdiction of the Bureau of Land Management which has been studied for wilderness character and is currently in an interim management status awaiting official wilderness designation or release from WSA status by Congress.

Xeric - pertaining to sites or habitats characterized by decidedly dry conditions.

Zones - BLM-administered lands are classified into four categories that establish guidance about their suitability for long-term ownership as follows:

- Zone 1 – lands with national or statewide significance (for wildlife, recreation, scenic or other values). Zone 1 lands are identified for retention in public ownership and are areas where management emphasis is being placed on increasing public land holdings through donations, exchange or sale.
- Zone 2 – lands with high resource values. Zone 2 lands are identified for retention or possible exchange for lands with higher resource values or transfer through the Recreation and Public Purposes Act.
- Zone 3 – lands that generally do not provide substantial resource, public, or tribal benefits; that many not be cost effective for BLM to manage; or that would represent a greater public benefit in other ownership. Zone 3 lands are potentially suitable for transfer, sale or other disposal, including lands identified as having potential land use benefits for local community expansion
- Community Expansion (CE). Lands zoned CE are retained in public ownership until needed for specific community purposes.

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BUREAU OF LAND MANAGEMENT
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